


PRACTICAL EDUCATION BY MAIL.



# THE UNITED CORRESPONDENCE SCHOOLS

NEW YORK.

EXPERT  
TEACHERS  
FOR  
EVERY  
HOME



A THOROUGH SYSTEM  
OF HOME STUDY IN

MECHANICS,  
ELECTRICITY,  
MINING,  
ART & ARCHITECTURE,  
NEWSPAPER WORK,  
ENGLISH BRANCHES.

THE GATEWAY TO SUCCESS OPEN FOR ALL

hC 6001  
W 5

---

Entered according to Act of Congress,  
in the year 1899, by  
THE UNITED CORRESPONDENCE SCHOOLS COMPANY,  
in the office of the  
Librarian of Congress at Washington.

---

NEW YORK PUBLIC LIBR.  
IN EXCHANGE.

18 Q 705



‡‡ THE ‡‡  
**UNITED CORRESPONDENCE SCHOOLS,**

154, 156, 158 FIFTH AVENUE,  
**NEW YORK.**

With which are incorporated The Institute for Home Study of Engineering and  
The Correspondence School of Technology of Cleveland.

---

INCORPORATED UNDER THE LAWS OF NEW YORK STATE.

**CAPITAL STOCK, \$250,000.**

**RICHARD P. ROTHWELL, C.E., E.M.,**  
PRESIDENT.

**AUGUST HECKSCHER,**  
VICE-PRESIDENT.

**FRED. W. EWALD, M.E.,**  
SEC'Y & TREAS.

---

OFFERS COURSES IN THE FOLLOWING SCHOOLS:

**The Home School of Newspaper Work.**

**The Home School of Business and English Branches.**

**The Schools of Engineering,**

INCLUDING

THE HOME SCHOOL OF MINING,

THE HOME SCHOOL OF METALLURGY,

THE HOME SCHOOL OF ELECTRICAL ENGINEERING,

THE HOME SCHOOL OF MECHANICAL ENGINEERING,

THE HOME SCHOOL OF STEAM ENGINEERING,

THE HOME SCHOOL OF CIVIL ENGINEERING,

THE HOME SCHOOL OF SANITARY ENGINEERING.

**The Schools of Art and Architecture.**

INCLUDING

THE HOME SCHOOL OF ART,

THE HOME SCHOOL OF ARCHITECTURE.

**The Schools of Trades.**

INCLUDING

THE HOME SCHOOL FOR SHEET METAL WORKERS,

THE HOME SCHOOL FOR PATTERN MAKERS.



# The United Correspondence Schools.

## INSTRUCTION DEPARTMENT.

R. P. ROTHWELL, C.E., E.M., *President.*

FRED. W. EWALD, M.E., *Director.*

WILLIAM DRYSDALE,  
*For 22 years of the Staff of the New York Times.*  
Instructor in Newspaper Work.

BENJAMIN NORTHROP,  
*Late Managing Editor of the New York Mail and Express.*  
Instructor in Newspaper Work.

HENRY EDWARD ROOD,  
*Late of the Staff of the New York Herald; Contributor to Harper's Weekly,  
The Century, The Forum, etc.*  
Instructor in Newspaper Work.

DR. EDWARD DYER PETERS, Jr.,  
Revises the Courses on Copper Smelting.

W. S. GRESLEY, F.R.S., E.M.,  
Revises the Courses on Coal Mining.

JAMES F. KEMP, A.B., E.M.,  
*Professor of Geology at Columbia University, N. Y.*  
Revises the Courses on Geology, Economic Geology and Ore Deposits.

WALTER RENTON INGALLS, E.M.,  
*Ass't Editor of The Mineral Industry and of The Engineering and Mining Journal.*  
Revises the Courses on Metallurgy.

EUGENE B. WILSON, C.E., E.M.,  
*Formerly Instructor at the Drifton School for Miners and Mechanics.*  
Instructor in Mining Engineering.

A. VAN ZWALUWENBURG, B.S., Ph C.,  
*Formerly Instructor in the University of Michigan; also Metallurgist for the  
Compania Aurora y Anexas.*  
Instructor in Metallurgy and Chemistry.

LEONARD W. SEELIGSBERG, M.E.,  
Instructor in Mechanical Engineering.

WILLIAM H. RADCLIFFE, E.E.,  
Instructor in Electrical Engineering.

B. C. WILLIAM, E.F.,  
Instructor in Telephony and Telegraphy.

CHARLES S. COX,  
Instructor in Drawing.

P. E. LEAHY,  
*Member American Society Naval Engineers.  
Formerly Chief Engineer and Superintendent of the Woodside Water Co., New York.*  
Instructor in Steam Engineering.

A. W. HALE, C.E.,  
Instructor in Hydraulic Engineering.

HARRIS C. BLANCHARD, A.M.,  
Instructor in Architecture.

GEORGE DINKELMAN,  
Instructor in Plumbing, Heating and Ventilation.

ROBERT YARROW,  
*Formerly with the Kensington Art Schools.*  
Instructor in Decorative Art.

FLETCHER W. HAVILAND  
Mechanical Drawing.

R. LOEWING,  
Mechanical Drawing.

M. J. SCANLON,  
Free Hand and Ornamental Drawing.

H. H. ROCKWELL,  
Instructor in Book-keeping.

MISS SARAH E. CRANE,  
Instructor in the English Branches.

MISS M. E. LEONARD,  
Instructor in Stenography.

Many assistants are also employed in the various departments.

6211623

THESE PRICES CANCELLED!  
SEE NEW PRICE LIST.

## COURSES AND TUITION FEES.

---

### REMITTANCES

All payments should be made by Express or Postal Money Order, New York Draft, or Registered Letter. Drafts and Money Orders should be made payable to THE UNITED CORRESPONDENCE SCHOOLS Co, 154, 156, 158 Fifth Avenue, New York. Money is sent through the mails unregistered at the sender's risk.

---

## THE HOME SCHOOL OF ELECTRICAL ENGINEERING,

### INTENDED FOR

Workers in Electrical Establishments, Winders, Station Engineers, Station Attendants, Electricians, Engineers, Draughtsmen, Motormen, Telegraph Operators, Linemen, Testers, Lamp Trimmers, Dynamo Tenders, Engineers of Isolated Plants, Designers, and others.

### Complete Electrical Engineering Course.

#### SUBJECTS.

Arithmetic.  
Algebra.  
Logarithms.  
Geometry.  
Mensuration.  
Trigonometry.  
Geometrical Drawing.  
Mechanical Drawing.  
Sketching of Machine Details.  
Elementary Mechanics.  
Hydromechanics.  
Pneumatics.  
Heat and Its Applications.  
Elementary Chemistry.  
Properties and Strength of Materials.  
Mechanisms and Machinery of  
Transmission.  
Machine Design.  
Steam Boilers and Their Design.  
Steam Boiler Accessories.  
Steam Engines and Their Design.  
Link and Valve Motion Design.  
Gas and Oil Engines.

Theories, Sources and Principles of Electricity.  
Electrical Measurements and Instruments.  
Telephone Instruments.  
Telephone Lines.  
Telephone Exchanges.  
Telephone Operating.  
Telegraphy.  
Principles of Direct Current Machinery.  
Principles of Alternating Current Machinery.  
Design and Construction of Dynamo-Electric Machinery.  
Arc and Incandescent Lighting.  
Electric Railways, Line Construction and Maintenance.  
Electrical Transmission of Energy.  
Electro-Plating and the Electrical Separation of Metals.  
Electric Heating and Signalling.  
Miscellaneous Applications of Electricity.  
Estimating.

Tuition Fee: When paid in advance, \$60; when paid in \$7.50 monthly payments, \$75. The student receives Electrical Experimental Apparatus free in this course.

## Complete Station Engineering Course.

### SUBJECTS.

Arithmetic.	Arrangement and Management of Steam Plants.
Mensuration and the Use of Letters in Formulas.	Principles and Measurements of Electricity.
Geometrical Drawing.	Dynamos and Motors and Their Management.
Mechanical Drawing.	Arc and Incandescent Lighting.
Sketching of Machine Details.	Electric Railways, Line Construction and Its Maintenance.
Mechanics.	Arrangement and Management of Electrical Stations.
Power Transmission.	
Steam and Steam Boilers.	
Steam Engines and Valve Gears.	

Tuition Fee: When paid in advance, \$50; when paid in \$6 monthly payments, \$60.

## Electrical Station Engineering.

### SUBJECTS.

Arithmetic.	Principles and Measurements of Electricity.
Mensuration and the Use of Letters in Formulas.	Dynamos and Motors and Their Management.
Geometrical Drawing.	Arc and Incandescent Lighting.
Mechanical Drawing.	Electric Railways, Line Construction and its Maintenance.
Sketching of Machine Details.	Arrangement and Management of Electrical Stations.
Mechanics.	
Power Transmission.	

Tuition Fee: When paid in advance, \$35; when paid in \$4.50 monthly payments, \$45.

## Electric Lighting.

### SUBJECTS.

Arithmetic.	Power Transmission.
Mensuration and the Use of Letters in Formulas.	Principles and Measurements of Electricity.
Geometrical Drawing.	Dynamos and Motors and Their Management.
Mechanical Drawing.	Arc and Incandescent Lighting.
Sketching of Machine Details.	Arrangement and Management of Electrical Stations.
Mechanics.	

Tuition Fee: When paid in advance, \$25; when paid in \$3.50 monthly payments, \$35.

## Electric Railways.

### SUBJECTS.

Arithmetic.	Principles and Measurements of Electricity.
Mensuration and the Use of Letters in Formulas.	Dynamos and Motors and Their Management.
Geometrical Drawing.	Electric Railways, Line Construction and its Maintenance.
Mechanical Drawing.	Arrangement and Management of Electrical Stations.
Sketching of Machine Details.	
Mechanics.	
Power Transmission.	

Tuition Fee: When paid in advance, \$25; when paid in \$3.50 monthly payments, \$35.

## Telegraphy and Telephony.

### SUBJECTS.

Arithmetic.	Telephone Instruments.
Mensuration and the Use of Letters in Formulas.	Telephone Lines.
Theories, Sources and Principles of Electricity.	Telephone Exchanges.
	Telephone Operating.
	Telegraphy.

Tuition Fee: When paid in advance, \$25; when paid in \$3.50 monthly payments, \$35.



## Electro-Plating.

### SUBJECTS.

Arithmetic.  
Mensuration and the Use of Letters in  
Formulas.  
Elementary Chemistry.

Principles and Measurements of Electricity.  
Electro-Plating and the Electrical Separation of Metals.

Tuition Fee: When paid in advance, \$25; when paid in \$3.50 monthly payments, \$35.

## THE HOME SCHOOL OF MECHANICAL ENGINEERING,

### INTENDED FOR

Machinists, Inventors, Designers, Toolmakers, Machine Shop Laborers, Pattern Makers, Boiler and Engine Builders, Draughtsmen, Shop Foremen, Moulders and Foundrymen, Blacksmiths, Engineers, Builders and Salesmen of Machinery, and others.

### Complete Mechanical Engineering Course.

#### SUBJECTS.

Arithmetic.  
Algebra.  
Logarithms.  
Geometry.  
Trigonometry.  
Mensuration.  
Geometrical Drawing.  
Mechanical Drawing.  
Sketching of Machine Details.  
Elementary Mechanics.  
Hydromechanics.  
Pneumatics.  
Heat and its Applications.  
Elementary Chemistry.

Properties and Strength of Materials.  
Mechanisms and Machinery of Transmission.  
Machine Design.  
Steam Boilers and Their Design.  
Steam Boiler Accessories.  
Steam Engines and Their Design.  
Link and Valve Motion Design.  
Gas and Oil Engines.  
Principles and Measurements of Electricity.  
Dynamoes and Motors and Their Management.  
Estimating.

Tuition Fee: When paid in advance, \$50; when paid in \$6 monthly payments, \$60.

### Mechanical Drawing.

#### SUBJECTS.

Arithmetic.  
Mensuration and the Use of Letters in  
Formulas.

Geometrical Drawing.  
Mechanical Drawing.  
Sketching of Machine Details.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

### Elementary Scientific Course.

#### SUBJECTS.

Arithmetic.  
Algebra.  
Logarithms.  
Geometry.  
Trigonometry.  
Mensuration.  
Elementary Mechanics.

Hydromechanics.  
Pneumatics.  
Heat and Its Application.  
Elementary Chemistry.  
Theories, Sources and Principles of Electricity.

Tuition Fee: When paid in advance, \$25; when paid in \$3.50 monthly payments, \$35.

## Mathematical Course.

### SUBJECTS.

Arithmetic.  
Algebra.  
Logarithms.

Geometry.  
Trigonometry.<sup>1</sup>  
Mensuration.

Tuition Fee: When paid in advance, \$20; when paid in \$3 monthly payments, \$30.

## THE HOME SCHOOL OF STEAM ENGINEERING,

### INTENDED FOR

Stationary Engineers, Steamfitters, Attendants in Central Stations, Draughtsmen, Firemen, Locomotive Engineers, Marine Engineers, Ship Builders, Locomotive Builders, Electrical Station Engineers, Dynamo Tenders, and others.

### Stationary Steam Engineering.

#### SUBJECTS.

Arithmetic.  
Mensuration and the Use of Letters in Formulas.  
Geometrical Drawing.  
Mechanical Drawing.  
Sketching of Machine Details.  
Mechanics.  
Power Transmission.  
Steam and Steam Boilers.  
Steam Engines and Valve Gears.

Gas and Oil Engines.  
Refrigeration and Ice-Making Machinery.  
Heating and Ventilation.  
Arrangement and Management of Steam Plants.  
Principles and Measurements of Electricity.  
Dynamios and Motors and Their Management.  
Hydraulic and Electric Elevators.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

### Complete Station Engineering.

#### SUBJECTS.

See similar course under Home School of Electrical Engineering, page 4.

### Marine Engineering.

#### SUBJECTS.

Arithmetic.  
Mensuration and the Use of Letters in Formulas.  
Geometrical Drawing.  
Mechanical Drawing.  
Sketching of Machine Details.  
Mechanics.  
Power Transmission.  
Marine Boilers and Accessories.  
Marine Engines and Valve Gears.  
Gas and Oil Engines.

Refrigeration and Ice-Making Machinery.  
Heating and Ventilation.  
Arrangement and Management of Marine Plants.  
Principles and Measurements of Electricity.  
Dynamios and Motors, and Their Management.  
Special Applications of Electricity on Ship-board.  
Principles of Steam Navigation.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.



## Locomotive Engineering.

### SUBJECTS.

Arithmetic.	Locomotives.
Mensuration and the Use of Letters in Formulas.	Spring and Valve Adjustment.
Geometrical Drawing.	Cars and Trucks.
Mechanical Drawing.	Train Management and Signaling.
Sketching of Machine Details.	Principles and Measurements of Electricity.
Mechanics.	Dynamos and Motors, and Their Management.
Traction Data, Train Resistances and Brakes.	Electric Railways and Line Construction.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

## THE HOME SCHOOL OF MINES,

### OFFERING THE FOLLOWING COURSES INTENDED FOR

Students desiring a Full Course in Mining; Miners who desire to qualify as Inspectors, etc., or for Certificates of Competence; Inspectors who wish to keep posted in Mine Matters; Mine Workers who desire to become Mine Foremen; Mine Mechanics and Steam Engineers; Assayers and Assistants; Millmen, Millwrights, Furnace Men, Mine, Mill and Smelter Clerk; Mine Owners; Prospectors; Mining Engineers; Hydraulic Miners, and others.

## Complete Mining Course.

### SUBJECTS.

Arithmetic.	Supporting Excavations.
Use of Letters in Formulas.	Gases in Mines.
Geometry, Trigonometry and Mensuration.	Ventilation of Mines.
Geometrical Drawing.	Lamps and Lighting.
Mechanical Drawing.	Mechanical Ventilators.
Sketching of Machine Details.	Steam and Steam Boilers.
Mechanics.	Gas and Steam Engines.
Elementary Chemistry.	Coal-Cutting and Rock Drill Machines.
General Geology.	Water Wheels and Air Compressors.
Petrography.	Power Transmission.
Economic Geology of the Coal Measures.	Mine Haulage.
Economic Geology of Metallic Minerals.	Hoisting and Hoisting Appliances.
Economic Geology of Non-Metallic Minerals.	Mine Drainage and Pumping.
Characteristics of Minerals.	Preparation of Anthracite Coal for Market.
Determinative Mineralogy.	Preparation of Bituminous Coal for Market.
Descriptive Mineralogy.	Coke Making.
Ore Deposits.	Architectural Engineering at Collieries.
Theory of Faults.	Ore Dressing.
Prospecting for Ores.	Mill Machinery.
Prospecting for Coal.	Mill Construction.
Drilling and Boring Machinery.	Theory and Practice of Surveying.
Surface Works for Metal Mines.	Mine Surveying and Mapping.
Surface Arrangements for the	Principles and Measurements of Electricity.
Economical Handling of Materials.	Dynamos and Motors, and Their Management.
Explosives, Drilling and Blasting.	Applications of Electricity to Mining.
Tunnel and Adit Driving.	Hydraulic and Placer Mining.
Shaft Sinking.	Mining by Bore-Holes.
Methods of Mining Anthracite Coal.	Quarrying.
Methods of Mining Bituminous Coal.	Mine Management.
Working Fiery Mines.	Mine Accidents.
Methods of Metal Mining.	

Tuition Fee: When paid in advance, \$60; when paid in \$7.50 monthly payments, \$75. The student receives Mineral Specimens and a Blow-pipe Outfit free in this course.

## Coal Mining.

### SUBJECTS.

Arithmetic.  
 Use of Letters in Formulas.  
 Geometry, Trigonometry and Mensuration.  
 Geometrical Drawing.  
 Mechanical Drawing.  
 Sketching of Machine Details.  
 Mechanics.  
 Economic Geology of the Coal Measures.  
 Theory of Faults.  
 Prospecting for Coal.  
 Drilling and Boring Machinery.  
 Surface Arrangements for the  
   Economical Handling of Materials.  
 Tunnel and Adit Driving.  
 Shaft Sinking.  
 Methods of Mining Anthracite Coal.  
 Methods of Mining Bituminous Coal.  
 Working Fiery Mines.  
 Supporting Excavations.  
 Gases in Mines.  
 Ventilation of Mines.  
 Lamps and Lighting.

Mechanical Ventilators.  
 Steam and Steam Boilers.  
 Gas and Steam Engines.  
 Power Transmission.  
 Mine Haulage.  
 Hoisting and Hoisting Appliances.  
 Mine Drainage and Pumping.  
 Coal-Cutting and Rock Drill Machines.  
 Water Wheels and Air Compressors.  
 Preparation of Anthracite Coal for Market.  
 Preparation of Bituminous Coal for Market.  
 Coke Making.  
 Architectural Engineering at Collieries.  
 Explosives, Drilling and Blasting.  
 Theory and Practice of Surveying.  
 Mine Surveying and Mapping.  
 Principles and Measurements of Electricity.  
 Dynamos and Motors, and Their Management.  
 Application of Electricity to Mining.  
 Mine Management.  
 Mine Accidents.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

## Short Coal Mining Course.

### SUBJECTS.

Arithmetic.  
 Mensuration and Use of Letters in Formulas.  
 Economic Geology of the Coal Measures.  
 Gases in Mines.  
 Ventilation of Mines.  
 Lamps and Lighting.  
 Prospecting for Coal.  
 Shaft Sinking.

Methods of Mining Anthracite Coal.  
 Methods of Mining Bituminous Coal.  
 Working Fiery Mines.  
 Geometrical Drawing.  
 Theory and Practice of Surveying.  
 Mine Surveying and Mapping.  
 Mechanics.  
 Machinery at Mines.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

## Metal Mining.

### SUBJECTS.

Arithmetic.  
 Use of Letters in Formulas.  
 Geometry, Trigonometry and Mensuration.  
 Geometrical Drawing.  
 Mechanical Drawing.  
 Sketching of Machine Details.  
 Mechanics.  
 Elementary Chemistry.  
 General Geology.  
 Petrography.  
 Economic Geology of Metallic Minerals.  
 Economic Geology of Non-Metallic Minerals.  
 Characteristics of Minerals.  
 Determinative Mineralogy.  
 Descriptive Mineralogy.  
 Ore Deposits.  
 Theory of Faults.  
 Explosives, Drilling and Blasting.  
 Prospecting for Ores.  
 Drilling and Boring Machines.  
 Surface Works for Metal Mining.  
 Tunnel and Adit Driving.  
 Shaft Sinking.  
 Methods of Metal Mining.

Supporting Excavations.  
 Gases in Mines.  
 Ventilation of Mines.  
 Lamps and Lighting.  
 Mechanical Ventilators.  
 Steam and Steam Boilers.  
 Gas and Steam Engines.  
 Power Transmission.  
 Rock Drills.  
 Water Wheels and Air Compressors.  
 Hoisting and Hoisting Appliances.  
 Mine Haulage.  
 Mine Drainage and Pumping.  
 Ore Dressing.  
 Mill Machinery.  
 Mill Construction.  
 Theory and Practice of Surveying.  
 Mine Surveying and Mapping.  
 Principles and Measurements of Electricity.  
 Dynamos and Motors, and Their Management.  
 Application of Electricity to Mining.  
 Hydraulic and Placer Mining.  
 Mine Management.  
 Mine Accidents.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55. The student receives Mineral Specimens and a Blow-pipe Outfit free in this course.

## Mechanical Engineering of Mines.

### SUBJECTS.

Arithmetic.  
Mensuration and the Use of Letters in Formulas.  
Geometrical Drawing.  
Mechanical Drawing.  
Sketching of Machine Details.  
Mechanics.  
Mechanical Ventilators.  
Steam and Steam Boilers.  
Gas and Steam Engines.  
Power Transmission.  
Coal-Cutting and Rock Drill Machines.

Water Wheels and Air Compressors.  
Hoisting and Hoisting Appliances.  
Mine Haulage.  
Mine Drainage and Pumping.  
Mill Machinery.  
Mill Construction.  
Preparation of Anthracite Coal for Market.  
Preparation of Bituminous Coal for Market.  
Principles and Measurements of Electricity.  
Dynamometers and Motors, and Their Management.  
Application of Electricity to Mining.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

## Geology.

### SUBJECTS.

General Geology.  
Petrography.  
Economic Geology of the Coal Measures.  
Economic Geology of Metallic Minerals.

Economic Geology of Non-Metallic Minerals.  
Economic Geology of Gems and Precious Stones.  
Ore Deposits.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

## Mineralogy.

### SUBJECTS.

Petrography.  
Characteristics of Minerals.

Determinative Mineralogy.  
Descriptive Mineralogy.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40. The student receives Mineral Specimens and a Blow-pipe Outfit free in this course.

# THE HOME SCHOOL OF METALLURGY,

### INTENDED FOR

Chemists, assayers, furnace foremen and assistants, mining engineers and workers in metal mines, furnacemen, clerks, timekeepers, smelter and rolling mill mechanics, weighers, shift bosses, mine owners, sampling mill foremen, ore buyers, steam engineers, draughtsmen, mechanical engineers and others.

## Complete Metallurgy Course.

### SUBJECTS.

Arithmetic.  
Mensuration and the Use of Letters in Formulas.  
Geometrical Drawing.  
Mechanical Drawing.  
Sketching of Machine Details.  
Mechanics.  
Elementary Chemistry.  
General Geology.  
Economic Geology of Metallic Minerals.  
Fuels and Refractory Materials.  
Ore Dressing.  
Sampling and Assaying.  
The Manufacture of Pig Iron.  
Puddling and Boiling.  
Steel Making.  
Rolling Mill Work.

Extraction of Copper and Nickel.  
Furnace Copper Refining.  
Electrolytic Copper Refining.  
Lead Smelting.  
Lead Refining.  
Mill Machinery.  
Gold and Silver Milling.  
Amalgamation.  
The Cyanide Process.  
Chlorination and Other Processes.  
Silver Lixiviation.  
Extraction of Zinc.  
Treatment of Ores of Less Common Metals.  
Electro-Metallurgical Processes.  
Gold and Silver Refining.

Tuition Fee: When paid in advance, \$75; when paid in \$10 monthly payments, \$100.



## Metallurgy of Gold and Silver.

### SUBJECTS.

Arithmetic.	Sampling and Assaying.
Mensuration and the Use of Letters in Formulas.	Mill Machinery.
Geometrical Drawing.	Ore Dressing.
Mechanical Drawing.	Gold and Silver Milling.
Sketching of Machine Details.	Amalgamation.
Mechanics.	The Cyanide Process.
Elementary Chemistry.	Chlorination and Other Processes.
General Geology.	Silver Lixiviation.
Economic Geology of Metallic Minerals.	Refining of Gold and Silver.
	Electro-Metallurgical Processes.

Tuition Fee: When paid in advance, \$50; when paid in \$6 monthly payments, \$60.

## Metallurgy of Copper and Nickel.

### SUBJECTS.

Arithmetic.	General Geology.
Mensuration and the Use of Letters in Formulas.	Economic Geology of Metallic Minerals.
Geometrical Drawing.	Sampling and Assaying.
Mechanical Drawing.	Ore Dressing.
Sketching of Machine Details.	Extraction of Copper and Nickel.
Mechanics.	Furnace Copper Refining.
Elementary Chemistry.	Electrolytic Copper Refining.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

## Metallurgy of Iron and Steel.

### SUBJECTS.

Arithmetic.	Elementary Chemistry.
Mensuration and the Use of Letters in Formulas.	Fuels and Refractory Materials.
Geometrical Drawing.	Manufacture of Pig Iron.
Mechanical Drawing.	Puddling and Boiling.
Sketching of Machine Details.	Steel Making.
Mechanics.	Rolling Mill Work.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

## Metallurgy of Lead.

### SUBJECTS.

Arithmetic.	Elementary Chemistry.
Mensuration and the Use of Letters in Formulas.	General Geology.
Geometrical Drawing.	Economic Geology of Metallic Minerals.
Mechanical Drawing.	Sampling and Assaying.
Sketching of Machine Details.	Ore Dressing.
Mechanics.	Lead Smelting and Refining.

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

## Metallurgy of Zinc and the Rarer Metals.

### SUBJECTS.

Arithmetic.	General Geology.
Mensuration and the use of Letters in Formulas.	Economic Geology of Metallic Minerals.
Geometrical Drawing.	Ore Dressing.
Mechanical Drawing.	Extraction of Zinc.
Sketching of Machine Details.	Treatment of Ores of Less Common Metals.
Mechanics	Electro-Metallurgical Processes.
Elementary Chemistry.	

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

## THE HOME SCHOOL OF CIVIL ENGINEERING,

### INTENDED FOR

Civil, Mining, Mechanical, Electrical and other Engineers, Surveyors and their Assistants, Draughtsmen, Contractors, Inspectors, City Engineers, Superintendents of Bridges and Railroads, Bridge Builders and Bridge Office Employees, Boiler Makers, Iron Workers, Track Foremen, Farmers, Soldiers, Superintendents of Railways, Supervisors, and all others who desire to obtain a complete, first-class engineering education.

### Hydraulic Engineering.

#### SUBJECTS.

Arithmetic.	Machine Design.
Algebra.	Steam and Steam Boilers.
Logarithms.	Steam Engines and Valve Gears.
Geometry.	Pumping Engines and Hydraulic Machinery.
Trigonometry.	Power Transmission.
Mensuration.	Methods of Water Supply.
Geometrical Drawing.	Reservoir Construction.
Mechanical Drawing.	Water Distribution.
Elementary Mechanics.	Construction of Canals.
Hydromechanics.	Systems of Irrigation.
Pneumatics.	Water Wheels and Their Installation.
Strength and Properties of Materials.	
Theory and Practice of Surveying.	

Tuition Fee: When paid in advance, \$55; when paid in \$6.50 monthly payments, \$65.

### Municipal Engineering.

#### SUBJECTS.

Arithmetic.	Mapping.
Algebra.	Physics and Chemistry of Plumbing.
Logarithms.	Plumbing and Drainage.
Geometry.	Principles of Heating and Ventilation.
Trigonometry.	Steam Heating.
Mensuration.	Hot-Water Heating.
Geometrical Drawing.	Hot-Air Heating.
Mechanical Drawing.	Construction of Subways.
Elementary Mechanics.	Construction and Maintenance of Roads and Pavements.
Hydromechanics.	Water Distribution.
Pneumatics.	Sewage.
Theory and Practice of Surveying.	

Tuition Fee: When paid in advance, \$55; when paid in \$6.50 monthly payments, \$65.

## Railroad Engineering.

### SUBJECTS.

Arithmetic.  
Algebra.  
Logarithms.  
Geometry.  
Trigonometry.  
Mensuration.  
Geometrical Drawing.  
Mechanical Drawing.  
Elementary Mechanics.  
Hydromechanics.

Pneumatics.  
Strength and Properties of Materials.  
Theory and Practice of Surveying.  
Mapping.  
Railroad Surveying.  
Excavation and Tunneling.  
Railroad Location.  
Roadbed and Track Construction.  
Design and Erection of Railroad Structures.

Tuition Fee: When paid in advance, \$55; when paid in \$6.50 monthly payments, \$65.

## Bridge Engineering.

### SUBJECTS.

Arithmetic.  
Algebra.  
Logarithms.  
Geometry.  
Trigonometry.  
Mensuration.  
Geometrical Drawing.  
Mechanical Drawing.  
Elementary Mechanics

Hydromechanics.  
Pneumatics.  
Strength and Properties of Materials.  
Graphical Statics.  
Theory of Trusses.  
Masonry Structures and Foundations.  
Construction of Bridges.  
Specifications and Estimates.

Tuition Fee: When paid in advance, \$55; when paid in \$6.50 monthly payments, \$65.

## Surveying and Mapping.

### SUBJECTS.

Arithmetic.  
Use of Letters in Formulas.  
Logarithms.  
Geometry.  
Trigonometry.

Mensuration.  
Geometrical Drawing.  
Theory and Practice of Surveying.  
Railroad Surveying.  
Mapping.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

## THE HOME SCHOOL OF SANITARY ENGINEERING,

### INTENDED FOR

Plumbers, Architects, Electricians, Gasfitters, Steamfitters, Apprentices in Plumblng Shops, Salesmen and Manufacturers of Heating and Ventilation Apparatus, and others.

## Plumbing, Drainage, Heating and Ventilation.

### SUBJECTS.

Arithmetic.  
Mensuration and the Use of Letters in Formulas.  
Geometrical Drawing.  
Mechanical Drawing.  
Mechanics.  
The Physics and Chemistry of Plumbing.  
Plumbing and Drainage.

Gasfitting.  
Principles of Heating and Ventilation.  
Steam and Hot-Water Boilers.  
Steam Heating.  
Hot-Water Heating.  
Hot-Air Heating.  
Steamfitting.  
Interior Electrical Work.

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.



## Plumbing, Drainage, and Gasfitting.

### SUBJECTS.

Arithmetic.	Mechanics.
Mensuration and the Use of Letters in Formulas.	The Physics and Chemistry of Plumbing.
Geometrical Drawing.	Plumbing and Drainage.
Mechanical Drawing.	Gasfitting.
	Interior Electrical Work.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

## Heating and Ventilation.

### SUBJECTS.

Arithmetic.	Principles of Heating and Ventilation.
Mensuration and the Use of Letters in Formulas.	Steam and Hot-Water Boilers.
Geometrical Drawing.	Steam Heating.
Mechanical Drawing.	Hot-Water Heating.
Mechanics.	Hot-Air Heating.
	Steamfitting.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

## We offer, besides the above Courses in Engineering, THE COMPLETE ENGINEERING COURSE,

### INTENDED FOR

All those who were enumerated under the separate Home Schools of Engineering.

### SUBJECTS.

Arithmetic.	Track Construction.
Algebra.	Design and Erection of Railroad Structures.
Logarithms.	Theory of Trusses.
Geometry.	Masonry Structures and Foundations.
Mensuration.	Construction of Bridges.
Trigonometry.	Specifications and Estimates.
Geometrical Drawing.	Pumping Engines and Hydraulic Machinery.
Mechanical Drawing.	Methods of Water Supply.
Sketching of Machine Details.	Reservoir Construction.
Elementary Mechanics.	Water Distribution.
Hydromechanics.	Construction of Canals.
Pneumatics.	Systems of Irrigation.
Heat and Its Applications.	Water Wheels and Their Installation.
Elementary Chemistry.	Physics and Chemistry of Plumbing.
Strength and Properties of Materials.	Plumbing and Drainage.
Graphical Statics.	Sewage.
Mechanisms and Machinery of Transmission.	Principles of Heating and Ventilation.
Machine Design.	Steam Heating.
Steam and Steam Boilers.	Hot-Water Heating.
Steam Engines and Valve Gears.	Hot-Air Heating.
Gas and Oil Engines.	Construction of Subways.
Power Transmission.	Construction and Maintenance of Roads and Pavements.
Arrangement and Management of Steam Plants.	Principles and Measurements of Electricity.
Locomotives.	Dynamos and Motors, and Their Management.
Traction Data, Train Resistances and Brakes.	Arc and Incandescent Lighting.
Cars and Trucks.	Electric Railroads, Line Construction and its Maintenance.
Theory and Practice of Surveying.	Arrangement and Management of Electrical Stations.
Railroad Surveying.	
Mapping.	
Excavation and Tunneling.	
Railroad Location.	

Tuition Fee: When paid in advance, \$160; when paid in \$20 monthly payments, \$200.

## THE HOME SCHOOL OF ARCHITECTURE,

INTENDED FOR

Architectural Draughtsmen, Builders, Contractors, Stone Cutters, Bricklayers, Carpenters, Plumbers, Decorators, Plasterers, Designers, Real Estate Agents, Electricians, and others.

### Complete Architectural Course.

SUBJECTS.

Arithmetic.	Soils and Foundations.
Use of Letters in Formulas.	Stone Work.
Geometry.	Brick Work.
Trigonometry.	Skew Arches.
Mensuration.	Plastering.
Elementary Mechanics.	Structural and Ornamental Iron Work.
Geometrical Drawing.	Plumbing, Drainage and Gasfitting.
Freehand and Ornamental Drawing.	Heating and Ventilation.
Perspective Drawing.	Interior Electrical Work.
History of Architecture.	Roofing.
Architectural Drawing and Designing.	Carpentry and Joinery.
Designing as Applied to Architecture, Pottery, Decoration, etc.	Stair Building.
Properties and Strength of Materials.	Estimating, Specifications and Superintendence.

Tuition Fee: When paid in advance, \$60; when paid in \$7.50 monthly payments. \$75.

### Structural Iron Work.

SUBJECTS.

Arithmetic.	Elementary Mechanics.
Algebra.	Strength and Properties of Materials.
Logarithms.	Graphical Statics.
Geometry.	Theory of Trusses.
Trigonometry.	Structural Iron Work.
Mensuration.	Ornamental Iron Work.
Geometrical Drawing.	Specifications and Estimates.
Freehand and Ornamental Drawing.	

Tuition Fee: When paid in advance, \$50; when paid in \$6 monthly payments, \$60.

### Architectural Designing.

SUBJECTS.

Arithmetic.	Perspective Drawing.
Mensuration and the Use of Letters in Formulas.	History of Architecture.
Geometrical Drawing.	Architectural Drawing and Designing.
Freehand and Ornamental Drawing.	Designing as Applied to Architecture, Pottery, Decoration, etc.

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

## THE HOME SCHOOL OF ART,

INTENDED FOR

Designers of Oil Cloth, Carpets, and Wall Papers, China and Tapestry Painters, Men and Women having artistic inclinations, Crayon and Pastel Artists, Modelers in Clay, Stone Cutters, Engravers, Illustrators, Painters, and others.

### Complete Art Course.

#### SUBJECTS.

Geometrical Drawing.	Anatomy and Drawing and Painting the
Freehand and Ornamental Drawing.	Figure from Life.
Perspective Drawing.	China, Porcelain and Stained-Glass Paint-
Designing as Applied to Architecture, Pot-	ing.
tery, Decoration, etc.	Tapestry, Silk and other Fabric Paintings.
Crayon and Pastel Drawing.	Wall-Paper, Carpet, Drapery, Oil-Cloth and
Sketching in Water Colors.	Mosaic Designing.
Painting in Oil Color, in Monochrome, etc.	Modeling and Carving.
Painting in Oil from Still Life.	Pen and Wash Drawings for Illustrations.

Tuition Fee: When paid in advance, \$75; when paid in \$10 monthly payments, \$100.

### Wall Paper, Carpet, Oil-cloth and Mosaic Designing.

#### SUBJECTS.

Geometrical Drawing.	Sketching in Water Colors.
Freehand and Ornamental Drawing.	Wall-Paper, Carpet, Drapery, Oil-Cloth and
Perspective Drawing.	Mosaic Designing.
Designing as Applied to Architecture, Pot-	
tery, Decoration, etc.	

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

### China and Porcelain Painting.

#### SUBJECTS.

Geometrical Drawing.	Sketching in Water Colors.
Freehand and Ornamental Drawing.	China, Porcelain and Stained-Glass Paint-
Perspective Drawing.	ing.
Designing as Applied to Architecture, Pot-	
tery, Decoration, etc.	

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

### Free-Hand Drawing.

#### SUBJECTS.

Arithmetic.	Geometrical Drawing.
Mensuration and the Use of Letters in For-	Free-Hand and Ornamental Drawing.
mulas.	Drawing Plates.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

### Perspective Drawing.

#### SUBJECTS.

Arithmetic.	Geometrical Drawing.
Mensuration and the Use of Letters in For-	Perspective Drawing.
mulas.	Drawing Plates.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.



## THE HOME SCHOOL FOR SHEET METAL WORKERS,

INTENDED FOR

Cornice Makers, Tinsmiths, Plumbers, Architects, Apprentices in Sheet Metal Establishments, Boiler Makers, and others.

### Sheet Metal Work.

SUBJECTS.

Arithmetic.  
The Use of Letters in Formulas.  
Geometry.  
Trigonometry.  
Mensuration.  
Geometrical Drawing.

Intersections and Developments.  
Sheet Metal Pattern Making.  
Construction of Sheet Metal Articles.  
Cornice Making.  
Practical Recipes.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

## THE HOME SCHOOL FOR PATTERN MAKERS.

INTENDED FOR

Pattern Makers, Carpenters, Moulders, Foremen in Foundry Shops, Foundrymen, Engineers, Designers, Draughtsmen, Machinists, and others.

### Pattern Making.

SUBJECTS.

Arithmetic.  
The Use of Letters in Formulas.  
Geometry.  
Trigonometry.  
Mensuration.  
Geometrical Drawing.  
Mechanical Drawing.

Principles of Pattern Making and Materials.  
Foundry Work.  
Constructional Joints.  
Gear-Wheel Patterns.  
Construction of Miscellaneous Patterns.  
Sweep and Loam Work.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

## THE HOME SCHOOL OF NEWSPAPER WORK,

OFFERING THE FOLLOWING COURSES INTENDED FOR

Beginners in newspaper work, young men and women who desire to enter journalism, persons wanting practical experience in composition, stenographers, teachers, typewriters, law clerks, printers, clerks, college students of both sexes, artists, illustrators, photographers, authors—in fact, all who desire to learn in a thoroughly practical way how newspaper work is done, with a view to entering the profession.

## Complete Newspaper Course.

### SUBJECTS.

The System of a Newspaper Office: Daily and Weekly, City and Country.	The Editor-in-Chief.
The New Reporter.	Editorial Writing.
Reading for the Young Reporter.	The Editorial Paragrapher.
Covering Small Assignments.	Special Contributors.
The Emergency Man.	Proof-Reading.
The City Editor.	The Composing and Press Rooms.
The Copy Reader.	The Sporting Editor.
The Woman Reporter.	The Turf, Field and Aquatic Reporter.
Salaried and Space Reporters.	Dramatic Criticism.
Reporting Fires.	Musical and Art Criticism.
Great Accidents.	Literary Criticism.
The Out-of-Town Assignment.	Marine, Financial and Commercial Reporting.
Police News.	Special Articles.
Labor Troubles.	The Sunday Editor.
Court Reporting.	The Newspaper Syndicate.
The Political Reporter.	The Great Value of Humor.
Reporting Social Events.	Illustrating Articles.
The Resident Correspondent.	Short-Hand and Typewriting.
The Staff Correspondent.	Avoiding Libel Suits.
The State Capital Correspondent.	The Associated Press.
The Man in Washington.	Minor News Agencies.
The London Man.	Local News Bureaus.
The Managing Editor.	The Counting Room.
The Night Editor.	The Publisher's Kingdom.
The Telegraph and Cable Editor.	The Advertising Field.
The Exchange Editor.	The Circulation Manager.

Tuition Fee: When paid in advance, \$60; when paid in \$7.50 monthly payments, \$75.

## Editorial Writer's Course.

### SUBJECTS.

The System of a Newspaper Office: Daily and Weekly, City and Country.	Musical and Art Criticism.
The Editor-in-Chief.	Literary Criticism.
Editorial Writing.	The Composing and Press Rooms.
The Editorial Paragrapher.	The Copy Reader.
Avoiding Libel Suits.	The Woman Reporter.
The Great Value of Humor.	The Night Editor.
Special Contributors.	The Exchange Editor.
The Man in Washington.	The Sunday Editor.
The London Man.	The Newspaper Syndicate.
Dramatic Criticism.	Short-Hand and Typewriting.

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

## Editor's Course.

### SUBJECTS.

The System of a Newspaper Office: Daily and Weekly, City and Country.	The Exchange Editor.
The City Editor.	Literary Criticism.
The Copy Reader.	The Editor-in-Chief.
Proof-Reading.	Editorial Writing.
Avoiding Libel Suits.	The Editorial Paragrapher.
The Managing Editor.	Special Contributors.
The Night Editor.	The Sunday Editor.
The Sporting Editor.	The Composing and Press Rooms.
The Telegraph and Cable Editor.	Dramatic Criticism.
	Musical and Art Criticism.

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

## Reporter's Course.

### SUBJECTS.

<p>The System of a Newspaper Office: Daily and Weekly, City and Country.          The New Reporter.          Reading for the Young Reporter.          Short-Hand and Typewriting.          Covering Small Assignments.          The City Editor.          Salaried and Space Reporters.          Avoiding Libel Suits.          The Emergency Man.          Reporting Fires.          Great Accidents.</p>	<p>Police News.          Court Reporting.          The Political Reporter.          Reporting Social Events.          Labor Troubles.          The Out-of-Town Assignment.          The Woman Reporter.          The Copy Reader.          Marine, Financial and Commercial Reporting.          Special Articles.          The Great Value of Humor.</p>
--	--

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

## Correspondent's Course.

### SUBJECTS.

<p>The System of a Newspaper Office: Daily and Weekly, City and Country.          The Resident Correspondent.          Avoiding Libel Suits.          The Staff Correspondent.          The State Capital Correspondent.          The Man in Washington.          The London Man.          The Out-of-Town Assignment.          The Associated Press.          Minor News Agencies.          The Newspaper Syndicate.          The Great Value of Humor.</p>	<p>The Woman Reporter.          Reporting Fires.          Great Accidents.          Labor Troubles.          Reporting Social Events.          The Political Reporter.          The Copy Reader.          The Composing and Press Rooms.          Illustrating Articles.          Reading for the Young Reporter.          Special Articles.          The Sunday Editor.</p>
--	--

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

## Special Department Course.

### SUBJECTS.

<p>The System of a Newspaper Office: Daily and Weekly, City and Country.          Avoiding Libel Suits.          Court Reporting.          Reporting Social Events.          The Political Reporter.          The Sporting Editor.          The State Capital Correspondent.          The Man in Washington.          The London Man.          Dramatic Criticism.          Musical and Art Criticism.</p>	<p>Literary Criticism.          The Editorial Paragrapher.          The Exchange Editor.          The Great Value of Humor.          Proof-Reading.          Marine, Financial and Commercial Reporting.          The Woman Reporter.          Special Contributors.          Special Articles.          Illustrating Articles.</p>
--	---

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.

## Newspaper Business Course.

### SUBJECTS.

<p>The System of a Newspaper Office: Daily and Weekly, City and Country.          The City Editor.          The Composing and Press Rooms.          Avoiding Libel Suits.          The Managing Editor.          The Night Editor.          Telegraph and Cable Editor.          The State Capital Correspondent.</p>	<p>The Man in Washington.          The London Man.          The Editor-in-Chief.          The Associated Press.          The Sunday Editor.          The Counting Room.          The Publisher's Kingdom.          The Advertising Field.          The Circulation Manager.</p>
---	---

Tuition Fee: When paid in advance, \$40; when paid in \$5 monthly payments, \$50.



## THE HOME SCHOOL OF BUSINESS AND ENGLISH BRANCHES,

OFFERING THE FOLLOWING COURSES INTENDED FOR

Clerks, Tradesmen, Teachers, Salesmen, Bookkeepers, Stenographers, Typewriters, Timekeepers, Law-clerks, Business Men and Women, Printers, Proof-readers, Farmers, Students, Mechanics, Apprentices, and all men and women desiring to perfect themselves in the English branches or acquire a knowledge of modern business methods.

### Complete Commercial Course.

#### SUBJECTS.

Business Arithmetic.  
Penmanship.  
Spelling.  
Practical Grammar.  
Rhetoric.  
English Literature.  
Composition.  
Business Correspondence.

Geography.  
U. S. History.  
U. S. Civil Government.  
Commercial Law.  
Single-entry Bookkeeping.  
Double-entry Bookkeeping.  
Stenography.

Tuition Fee: When paid in advance, \$45; when paid in \$5.50 monthly payments, \$55.

### English Branches.

#### SUBJECTS.

Business Arithmetic.  
Penmanship.  
Spelling.  
Practical Grammar.  
Rhetoric.  
English Literature.

Composition.  
Geography.  
Physical Geography.  
U. S. History.  
U. S. Civil Government.

Tuition Fee: When paid in advance, \$25; when paid in \$3.50 monthly payments, \$35.

### Business.

#### SUBJECTS.

Business Arithmetic.  
Penmanship.  
Spelling.  
Practical Grammar.  
Business Correspondence.

U. S. Civil Government.  
Commercial Law.  
Single-entry Bookkeeping.  
Double-entry Bookkeeping.  
Stenography.

Tuition Fee: When paid in advance, \$35; when paid in \$4.50 monthly payments, \$45.

### Complete Stenographic Course.

#### SUBJECTS.

Penmanship.  
Spelling.  
Practical Grammar.  
Punctuation.

Composition.  
Business Correspondence.  
Stenography.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.

### Bookkeeping.

#### SUBJECTS.

Business Arithmetic.  
Penmanship.  
Spelling.

Business Correspondence.  
Single-entry Bookkeeping.  
Double-entry Bookkeeping.

Tuition Fee: When paid in advance, \$30; when paid in \$4 monthly payments, \$40.



# The United Correspondence Schools.

---



OME time has passed since education by correspondence was looked upon as an experiment. Like the telephone and the trolley car, it is something that the public need, and so useful a system could not remain long in the experimental stage. It is now not only a recognized form of instruction, but it has become in a comparatively short time one of the most popular and most useful of all systems of imparting knowledge.

Not every person can fit himself or herself for higher duties and more advanced work by attending the technical or other schools, but every man and woman who lives within reach of the mails can acquire the necessary education by correspondence. The field is world-wide. Wherever the mails go, and they go almost everywhere, an education can be had at comparatively small cost and without interference with daily duties.

It is largely through THE UNITED CORRESPONDENCE SCHOOLS that this modern system of education has been made known to the whole world. The name of these schools and the name of the system are synonymous terms. They have the same meaning. And both names are familiar as household words wherever there are men and women who desire to better their condition.

## The Best Facilities.

It was inevitable that THE UNITED CORRESPONDENCE SCHOOLS should almost instantly take the lead in this modern system of instruction, because Correspondence Schools are governed by the same natural laws as govern other schools and colleges. Small schools must be content with small methods, while large schools, like THE UNITED CORRESPONDENCE SCHOOLS, situated in the commercial and educational centre of the country, with abundant capital, can command the best of everything: the best instructors, the best facilities, the best workmanship in every direction. The names of some of our instructors are doubtless familiar to you. Each one is as good an authority as can be had in his special department. Many of them are men of national reputation.

## Work for the Home.

Our work lies in a field which is untilled under any other system. It has entered the homes of those who could be reached by no other means, and it has educated a multitude of mechanics and craftsmen by giving them thorough and practical knowledge. We are in position to provide our students with the



results of many years' experience, which has enabled us to reduce the system to a sound and practical basis. It is not our object to compete with the colleges, academies, or technical schools. If you are so situated that you can attend one of those educational institutions, by all means do so. Our system appeals to those who from any cause are debarred from such privileges.

### **Make Up For Lost Time.**

There is practically no limit to the field covered by this modern system. All, without regard to sex, almost without regard to age, can enjoy its advantages. Thousands of men and women, boys and girls, find themselves at a disadvantage because their early education was neglected. Here is the opportunity for them to make up for lost time; to give themselves a fair chance in the struggle of life. With a knowledge of scientific methods, which is only another term for correct methods, with a thorough understanding of the principles of their trade or profession, the way to success is made easy; and this knowledge is obtainable with the least expenditure of money, and in the shortest time, through THE UNITED CORRESPONDENCE SCHOOLS. Little preliminary education is required for a thorough mastery of these courses. Can you read and write? If necessary we will teach you to read better and write better, before leading you into higher studies. Everything is made perfectly plain. There are no high-sounding words or terms in our text books for the sake of effect. The hammer goes straight to the head of the nail.

### **Some of the Advantages.**

The advantages of this system are so apparent that they scarcely need explanation. The lessons go direct to the home of the student. Each student is the only one in his class. He is not hampered either by unusually bright students who are far in advance of him, or by dull students who are continually keeping a class back. The student can take his own time with the lessons. He is not hurried; what one man can grasp in ten minutes may require a day's careful thought from another. All of the studying can be done in the evenings or at other unoccupied times. Students can enter these schools and begin their studies at any time. WHEN A STUDENT ENROLLS, IT IS UNDERSTOOD THAT HE IS TO RECEIVE INSTRUCTION IN HIS COURSE AS LONG AS HE PAYS HIS INSTALLMENTS REGULARLY, AND AFTER HIS COURSE IS PAID UP HE IS, ACCORDING TO THE CONDITIONS NAMED IN THE ENROLLMENT BLANK, ENTITLED TO INSTRUCTION UNTIL HE COMPLETES HIS COURSE, NO MATTER HOW LONG IT TAKES HIM TO DO SO. Any of our courses can be taken in entire privacy. If your education in any line has been neglected and you take advantage of the facilities of our schools, it is not necessary, unless you desire it, for your friends or companions to know that you are taking any of our courses. Lessons are mailed in plain envelopes without any printing, when desired. Each student receives special personal instruction. He is under the particular care of the instructors in his course, who give special attention to his papers, read them with the greatest care, and comment kindly upon any errors that are found in them.

L-107C

## Our Text Books.

Usually the student studying alone finds great difficulty with text books. The text books of the ordinary schools are prepared for use in classes which are directly under the eye of the teacher, and in all of them many points are left for the teacher to explain. It is almost impossible for the student studying alone to understand the whole meaning of what he finds in any ordinary text book. Besides, most of the text books in use in ordinary schools were prepared years ago. The preparation of text books is expensive work, and they are changed only when necessary. But they do not change as rapidly as customs and methods change, and consequently a large proportion of the text books in use in ordinary schools are far behind the times. In electrical matters, particularly, the text books of only a few years ago are already antiquated.

The text books in use in THE UNITED CORRESPONDENCE SCHOOLS are all prepared by the instructors in the schools with the greatest care, with special regard to the needs of students who are not in the room with an instructor, and every point is made perfectly plain. They contain no useless matter whatever, like most text books. Every statement, every question, is written in plain language that all may understand. They are carefully revised from time to time, whenever revision is made necessary by new discoveries or improved methods; consequently they are always up to date. These valuable text books are supplied by the schools without cost to the student.

When he has completed his course and has paid his tuition fee in full, a copy of the then latest edition of all the Instruction Papers and Drawing Plates pertaining to his course, handsomely bound, will be given to him absolutely free of charge. As the Instruction Papers are constantly revised to keep abreast with modern developments, each student will, therefore, on completing his course, receive, in addition to those he receives for use in the course of his studies, a set of handsome and valuable books which contain, in a revised form, all that he has studied in his course, together with the matter which progress has brought forth in the various subjects since he studied them.

## Our Method of Instruction.



Y our method of instruction each subject is made so plain that any student who can read understands it in every particular. This would be impossible with the text books in use in ordinary schools, which all contain matter that requires explanation by the teacher.

For this reason all our text books, as has been said, are prepared by our own instructors for our own students. They make the most difficult subject as plain and easy as the alphabet; they can be understood at a glance.

One or two of these text books are first sent to the student, with examinations on the subject included in each. As soon as the student masters the first lesson he answers the questions on the subject which he has studied, and sends his work to us.

The work is carefully examined by us, and if any part of the subject

apparently is not entirely clear to the student, the work is returned, with directions for further study. All errors are marked in red ink, so that they can readily be seen.

Each part of the subject is thoroughly understood by the student before he goes on to the next part, the text book being so graded that each new step, as it is reached, seems as easy and simple as the one which preceded it.

When a student finds difficulty in understanding any part of the text book he writes to us and our instructors give him every possible assistance. Every student who completes one of our courses has a thorough understanding of all the subjects included in that course, and receives a Diploma or Certificate.

### **Our Staff of Instructors.**

Our staff of instructors is not only thoroughly competent, but it is, as you can see by referring to the list, sufficiently large to give to each individual student the most careful and prompt attention. We take care of the student's interests to a degree that will not permit us to slight his work in any possible way. Write to us, therefore, as often as you find any difficulty, for we prefer to answer your inquiries several times a day rather than have you fail to understand a principle.

It is not alone in arithmetical errors, or to errors in the subject matter of the text book, that our particular attention is given. We correct the student's punctuation, his spelling, his capitalization, and when necessary criticise his penmanship. The worse a paper is written, the less knowledge is displayed, the more careful is the attention devoted to it by our instructors, because the weak need their special support and guidance.

### **Text Books Without Cost.**

The student requires no text books except those which we send to him without extra charge, and which become his property. This makes ours an extremely inexpensive method of teaching, good text books being very costly.

We pay all postage in sending papers or communications to students, and they pay the postage on their mail to us.

By our method each student receives closer personal instruction than is possible in a class-room, where the instructor cannot devote his time and energy to each student individually, but often knows his pupils only by sight. The correspondence instructor, by our method, can give particular attention to each student, correcting his answers and reviewing his work at a time when that student alone interests him, and when no other student occupies his mind. Not knowing his pupil, the instructor cannot be influenced by him in any way, and impartial and thorough attention to all students is insured.



"Every man stamps his value on himself.  
The price we challenge for ourselves is given us;  
Man is made great or little by his own will."

—Schiller.

## Who Are Benefited?



HO are benefited by such instruction as we give? Rather ask who would *not* be benefited by it. The collegian fresh from the university finds here something practical, something of real use to him in making his way in the world. The mechanic gets the knowledge which enables him to advance in his work and increases his earning power. The foreman improves and fits himself to become a superintendent or an employer. Every young man and young woman may have here, at small cost and scarcely any loss of time, the instruction that is necessary to his or her advancement. You can hardly know so much but that you can get information of lasting value—of money value—from one or more of our courses. You can hardly know so little but that you are fitted to begin. What you get from us is that kind of practical education that you can turn immediately into money.

Some of our courses, at least, will benefit YOU. You see that for yourself. WRITE TO US, NAME THE COURSE THAT YOU ARE SPECIALLY INTERESTED IN, AND A LARGE CATALOGUE CONTAINING A LIST OF ALL THE SUBJECTS TAUGHT IN THAT COURSE, WITH FULL EXPLANATIONS ON ALL POINTS, WILL IMMEDIATELY BE SENT YOU. Do not hesitate to write. A large part of our business is answering letters. We shall be glad to hear from you, whether you become one of our pupils or not.

THE HOME SCHOOL OF BUSINESS AND ENGLISH BRANCHES offers unparalleled advantages as well to the very beginner as to all Clerks, Tradesmen, Teachers, Salesmen, Bookkeepers, Stenographers, Typewriters, Timekeepers, Law Clerks, Business Men and Women, Printers, Proofreaders, Farmers, Students, Mechanics, Apprentices, and all men and women desiring to perfect themselves in the English Branches, or to acquire a knowledge of modern business methods.

THE HOME SCHOOL OF MINES is especially intended for all students desiring a full course in Mining Methods; for Miners who desire to qualify themselves as Inspectors, etc., or for Certificates of Competence; Inspectors who wish to keep informed in Mine Matters; Mine Workers who desire to become Mine Foremen; Mine Mechanics and Steam Engineers; Assayers and Assistants; Millmen, Millwrights, Furnacemen, Mine, Mill and Smelter Clerks, Mine Owners, Prospectors; Mining Engineers; Hydraulic Miners, and others.

THE HOME SCHOOL OF METALLURGY is of the highest value to Chemists, Assayers, Furnace Foremen and Assistants, Mining Engineers and Workers in Metal Mines, Furnacemen, Clerks, Timekeepers, Smelter and Rolling Mill Mechanics, Weighers, Shift Bosses, Mine Owners, Sampling Mill Foremen, Ore Buyers, Steam Engineers, Draughtsmen, Mechanical Engineers, and others.

In THE HOME SCHOOL OF ELECTRICAL ENGINEERING, with its Complete Course, its Stationary Engineering Course, and its courses in Electrical Station Engineering, Electric Lighting, Electric Railways, Telegraph and Telephony, and Electro-plating, we give thorough instruction to Workers in Electrical Establishments, Winders, Station Engineers, Station Attendants, Electricians, Engineers, Draughtsmen, Motormen, Telegraph Operators, Linemen, Testers, Lamp Trimmers, Dynamo Tenders, Engineers of isolated plants, and Designers and others.

THE HOME SCHOOL OF MECHANICAL ENGINEERING is of the highest importance to all Machinists, Inventors, Designers, Toolmakers, Machine Shop Laborers, Pattern Makers, Boiler and Engine Builders, Draughtsmen, Shop Foremen, Moulders and Foundrymen, Blacksmiths, Engineers, Builders and Salesmen of Machinery, and others.

THE HOME SCHOOL OF STEAM ENGINEERING is intended especially for the advancement of Stationary Engineers, Steamfitters, Attendants in Central Stations, Draughtsmen, Firemen, Locomotive Engineers, Marine Engineers, Ship Builders, Locomotive Builders, Electrical Station Engineers, Dynamo Tenders, and others.

THE HOME SCHOOL OF CIVIL ENGINEERING, with its thorough courses in Hydraulic Engineering, Municipal Engineering, Railroad and Bridge Engineering, as well as Surveying and Mapping, is adapted to the needs of Civil, Mining, Electrical and all other Engineers, Surveyors and their assistants, Draughtsmen, Contractors, Inspectors, City Engineers, Superintendents of Bridges and Railroads, Bridge Builders and Bridge Office Employees, Boiler Makers, Iron Workers, Track Foremen, Farmers, Soldiers, Superintendents of Railways, Supervisors, and all others who desire to obtain a thorough engineering education.

In THE HOME SCHOOL OF SANITARY ENGINEERING, complete instruction in Plumbing, Drainage, Heating and Ventilation and Gas Fitting is especially given to Plumbers, Architects, Electricians, Gasfitters, Apprentices in Plumbing Shops, Salesmen and Manufacturers of Heating and Ventilating Apparatus, and others.

In THE HOME SCHOOL OF ARCHITECTURE a complete Architectural Course is given. The courses in Structural Iron Work and Architectural Designing are arranged especially for the benefit of Architectural Draughtsmen, Builders, Contractors, Stone Cutters, Bricklayers, Carpenters, Plumbers, Decorators, Plasterers, Designers, Real Estate Agents, and others.

THE HOME SCHOOL OF ART includes, besides the Complete Art Course, courses in Wall Paper, Carpet, Oil Cloth and Mosaic Designing, and China and Porcelain Painting. Men and Women with artistic inclinations, Crayon and Pastel Artists, Modelers in Clay, Stone Cutters, Engravers, Illustrators, Painters, and others will find this course attractive and valuable.

THE HOME SCHOOL FOR SHEET METAL WORKERS is especially designed to improve Cornice Makers, Tinsmiths, Plumbers, Architects, Apprentices in Sheet Metal Establishments, Boiler Makers, and others.

THE HOME SCHOOL FOR PATTERN MAKERS furnishes instruction of great value to Pattern Makers, Carpenters, Moulders, Foremen in Foundry Shops, Foundrymen, Engineers, Designers, Draughtsmen, Machinists, and others.

Not only all those who have just been named, but every man and woman of ordinary intelligence, young or old, no matter of what nationality nor in what occupation he or she may be engaged, may derive the greatest benefit from a course in THE HOME SCHOOL OF NEWSPAPER WORK. Beginners in journalism, young men and women who desire to enter the profession, persons who need practical experience, Stenographers, Teachers, Operators, Law Clerks, Printers, College Students of both sexes, Artists, Photographers and Authors; in fact, all who desire to learn in a thoroughly practical way how newspaper work is done with a view to entering the profession, and all who have or are likely to have occasion to write, even if it is only to write letters, which should always be well written, will find unusual advantages in this course.

## We Supply Your Needs.



**W**HAT are your needs? See whether these are not some of them. A workingman, a mechanic, every one who is employed, who has daily duties to perform, to study successfully, must study unhampered by competition or hurry. He must be the whole class himself.

His study hours must be arranged to suit his own convenience. He must be able to lay the work down and to take it up again when it best suits him.

He must take advantage of not only idle hours, but of idle half hours. He cannot always tell when they will come. The studies must always be in readiness for *him*, for he cannot always be ready for the studies. In the evening hour when he would be dressing to attend a school, he can do a good hour's work at our lessons.

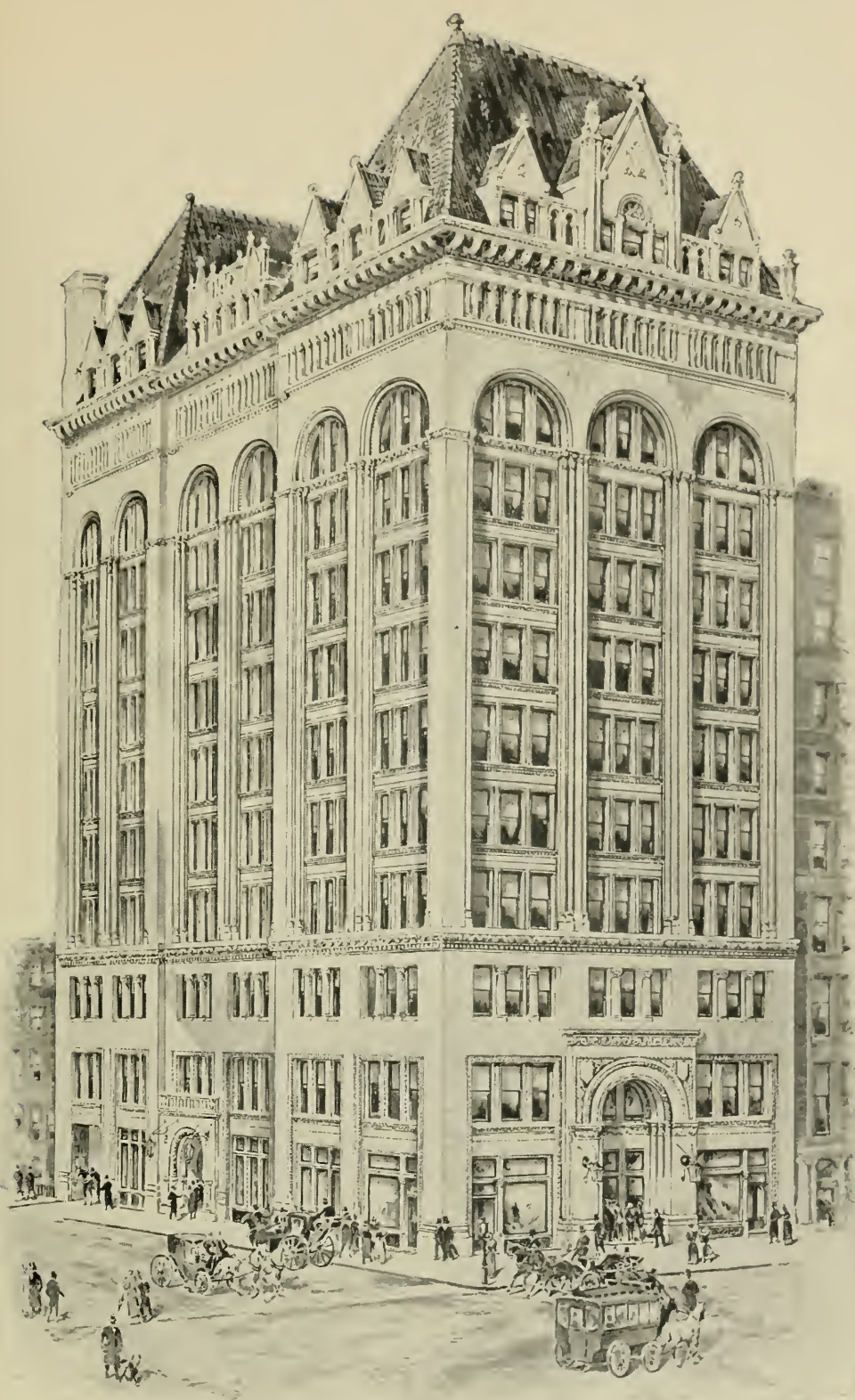
He must have text books that he can understand. If they are "above him" they are of no practical use. All our text books are made so plain that he who can read a newspaper can understand every word in them.

Every one of these needs we supply. There is no longer any excuse for ignorance. Do you remember the best advice that the celebrated Dr. Samuel Johnson ever gave? It was: "Improve each moment as it flies." Under our system you can improve each moment; under all other systems many precious moments are sure to be wasted. You are neither too old nor too young. "It is better to learn late than never," said Publius Syrus. "It is good to live and learn," said Cervantes.

"Help thyself, and God will help thee."







HOME OF  
THE UNITED CORRESPONDENCE SCHOOLS,  
154-156-158 Fifth Avenue,  
NEW YORK.

